

NATIONAL ACADEMY OF SCIENCES  
NATIONAL RESEARCH COUNCIL  
OF THE UNITED STATES OF AMERICA

SPACE SCIENCE BOARD

February 5, 1962

Dr. Joshua Lederberg  
Department of Genetics  
School of Medicine  
Stanford University  
Palo Alto, California

Dear Joshua:

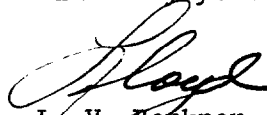
In accordance with my recent telegram, I am writing to give you further information concerning progress in our plans for a summer study of the NASA space science program: you will recall that this study was discussed at our last Board meeting with Dr. Wiesner and with Mr. Webb and other NASA officials, who were enthusiastic about this undertaking.

A decision has now been made to hold the study at the State University of Iowa during the period June 18 to August 10, 1962. Dr. Van Allen has agreed to serve as general chairman and Dr. Kellogg as vice chairman. The enclosed outline will provide you with more details of our present plans and will give you general information about the work and housing situation.

I believe this effort is one of the most important which the Space Science Board has undertaken since it was first established some three and a half years ago. The summer study affords a major opportunity to present the judgment and views of the scientific community regarding the goals and objectives of the U. S. space program at a critical juncture in the long range development of NASA's space science plans. Consequently, I urge your assistance to the Board in this study.

A formal invitation from Dr. Bronk, President of the Academy, should reach you soon.

Sincerely yours,

  
L. V. Berkner  
Chairman

encl.

cc: Dr. Van Allen  
Dr. Kellogg

February 5, 1962

Space Science Board  
National Academy of Sciences  
2101 Constitution Avenue, N. W.  
Washington 25, D. C.

Tentative Outline  
for  
SPACE SCIENCE SUMMER STUDY

The Task. The goals of the Space Science Summer Study are broad and fundamental: the summer study group will undertake an examination of the scope, quality and objectives of both the current and future space science program. The summer study is expected to develop:

(a) A report, which should provide a guide for national activities in space science, particularly applicable to the NASA program, over the next few years.

(b) A series of briefings by study group members for officials of government concerned with space research and with policy.

(c) While less tangible in nature, it is expected that the study will have important consequences in directing scientists throughout the country to the opportunities for basic research in the space science program.

Detailed plans for the work program of the summer study are still being developed. However, the attached list suggests topics that might be considered. Suggestions are invited, and the participants can further define their tasks over the next few months and as the study itself gets underway.

At the outset of the study, a series of presentations is planned by officials of the agencies responsible for the conduct of the space research program. These presentations will discuss, in as much detail as necessary, current aspects of program formulation, content and execution, as well as administrative and organizational policies and procedures. These presentations will help to identify primary activities and problems.

After identification of these topics, small subcommittees may be established to investigate more fully the subjects chosen for detailed examination. Some three or four weeks may be allotted to the above portion of the summer's work.

With the conclusion of this activity, it is expected that all members of the summer study group will consider the results of all subcommittee activities and prepare a consolidated report and recommendations.

The summer study will probably close with a series of briefings for officials of the government concerned with the conduct of the space science program and with policy matters.

The Facilities. The Study will be held at the State University of Iowa during the period June 18 through August 10, 1962.

Working accommodations and other facilities for the study at the State University of Iowa are excellent: air-conditioned facilities (auditorium, conference rooms and 40 private offices), reproduction facilities and ample space for the summer study managerial and secretarial staffs are assured.

The State University of Iowa will provide air-conditioned rooms for individual participants or air-conditioned housing for those participants who wish to bring their families. The staff of the Space Science Board secretariat has investigated the recreational possibilities in the region adjacent to the State University of Iowa and we are certain that your family would find these activities plentiful and interesting.

Brochures describing the working accommodations, housing and leisure-time activities are being prepared and will be forwarded shortly.

The Academy will provide appropriate honoraria for participants and cover travel and living expenses.

Attachment

## Suggested Topics for Consideration by Space Science Summer Study

1. Scope, quality and objectives of NASA's current science program.
2. Distribution of emphasis among terrestrial, lunar, planetary, interplanetary, solar and astrophysical missions.
3. Examination of present planning with respect to relative emphasis on various scientific areas and with respect to omissions in areas of potential importance.
4. Consideration of the long range scientific goals in space science.
5. Doctrine for the competitive selection of experimenters and experiments for specific missions.
6. Proper planning of major missions of national scope (e.g. astronomical satellites) to assure participation of the scientific community to the greatest practical extent.
7. Value of ground-based research and its relationship to balloon, satellite and space probe research.
8. Working arrangements between central NASA laboratories and diverse experimental groups having lesser technical facilities.
9. Proper relative roles of NASA laboratories and those in universities, independent research foundations and industry.
10. Adequacy of telemetering and tracking networks.
11. Manner of handling and distribution of observational data.
12. Computational capabilities and future requirements.
13. Relationship of the man-in-space program and the scientific program.
14. Consideration of manned versus unmanned scientific missions.
15. Relationship of observational and interpretative functions.
16. Technological utilization of new scientific knowledge.
17. Publication and dissemination of results of work.
18. Preservation of the motivation and professional integrity of the individual scientist.
19. Role of NASA and other government agencies in providing motivation and educational opportunities for a new generation of scientists and engineers.
20. Relationships of the United States program in space science to that in other countries and opportunities for international collaboration.